

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

**Listing of Claims:**

Claim 1 (Previously presented): A method of providing a user computer with access to files of a network, the method comprising:

establishing a communication link from the user computer to an access control system of the network;

launching a viewer program that controls a status of the communication link;

detecting times when the user is not actively sending or receiving data from the network, and downloading ad files from the network to the user computer during such times, such that the viewer program maintains a pool of ad files at the user computer for display and performs ad pool management tasks;

periodically opening a viewer program window in which a next ad file from the ad file pool is displayed;

hiding the viewer program window after a predetermined number of ad files from the ad file pool have been played and keeping the viewer program window hidden for a predetermined quiet interval; and

managing the ad file pool so as to keep track of the number of times each ad file in the ad file pool has been viewed and determine when each ad file in the ad file pool should no longer be viewed.

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

**Claim 2 (Previously presented):** A method as defined in claim 1, wherein managing the ad file pool includes determining that an ad file should not be viewed after the ad file has been viewed a predetermined number of times.

**Claim 3 (Previously presented):** A method as defined in claim 1, wherein managing the ad file pool includes determining that an ad file should not be viewed after the ad file has been viewed for a predetermined number of calendar days.

**Claim 4 (Previously presented):** A method as defined in claim 1, wherein managing the ad file pool includes discarding an oldest ad file from the ad file pool if the ad file pool size exceeds a predetermined size limit value.

**Claim 5 (Previously presented):** A method as defined in claim 1, wherein managing the ad file pool includes not tracking an ad file as having been viewed if the viewing of the ad file is prematurely halted before normal completion.

**Claim 6 (Previously presented):** A method as defined in claim 1, wherein the viewer program maintains an ad information table of a local database in the user computer.

**Claim 7 (Previously presented):** A method as defined in claim 1, further including periodically performing fraud control, wherein the viewer program sends a pulse message to the access control

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

system at predetermined intervals, and the access control system causes the communication link to the network to be severed if it fails to receive an expected pulse message.

Claim 8 (Previously presented): A method as defined in claim 7, wherein the viewer program maintains an ad information table that includes ad file information initially received from the access control system, such that the viewer program compares actual ad file information determined by the user computer with corresponding ad file information in the table, and such that the access server causes the communication link to the network to be severed if there is a discrepancy.

Claim 9 (Previously presented): A method as defined in claim 7, wherein the fraud control comprises comparing ad information in the local database with actual ad file information for the corresponding ad file, and indicating fraud if there is a discrepancy.

Claim 10 (Previously presented): A method as defined in claim 7, wherein the viewer program terminates the network connection if fraud is indicated.

Claim 11 (Previously presented): A method as defined in claim 1, wherein the access control system includes an Ad server that provides the ad files to a user, a Network Access Server that assigns a network address for an authorized user, and an Access, Authorization, and Accounting server that determines if authorization should be granted to a user.

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

**Claim 12 (Previously presented): A method as defined in claim 1, further including:**

**determining ad impression viewing data corresponding to the number of times each ad file in the ad file pool has been viewed;**

**determining click through data corresponding to network addresses visited by the user during the viewing of an ad file; and**

**reporting the ad impression viewing data to the access control system.**

**Claim 13 (Previously presented): A method as defined in claim 1, further including storing state information for the viewing program at the user computer.**

**Claim 14 (Previously presented): A method as defined in claim 1, wherein the viewer program displays closed captioning information.**

**Claim 15 (Previously presented): A method as defined in claim 1, wherein the viewer program tracks the number of online network access sessions by the user computer.**

**Claim 16 (Previously presented): A method as defined in claim 1, wherein the viewer program tracks the time spent online with network access by the user computer.**

**Claim 17 (Previously presented): A method as defined in claim 1, wherein establishing a communication link includes:**

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

receiving user identification information;

verifying demographic information for the identified user stored at the access control system  
and providing the communication link;

collecting demographic information from the user computer in an initial registration and  
access operation, storing the demographic information at the access control system and identifying it  
with the registered user, and providing the communication link; and

otherwise terminating the communication link and denying network access.

Claim 18 (Previously presented): A method as defined in claim 17, further including:

determining ad impression viewing data corresponding to the number of times each ad file in  
the ad file pool has been viewed;

determining click through data corresponding to network addresses visited by the user during  
the viewing of an ad file; and

reporting the ad impression viewing data to the access control system.

Claim 19 (Previously presented): A method as defined in claim 18, further including preparing a  
Demographic Report that summarizes the reported ad impression viewing data for multiple computer  
users over a current time period.

Claim 20 (Previously presented): A method as defined in claim 19, further including providing the  
Demographic Report to a computer user identified as an ad file sponsor.

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

Claim 21 (Previously presented): A method as defined in claim 19, wherein the Demographic Report includes demographic report fields that are selected by the computer user.

Claim 22 (Previously presented): A method as defined in claim 19, wherein providing the Demographic Report includes providing archival reports for prior time periods.

Claim 23 (Previously presented): A method as defined in claim 19, further including:

comparing an ad file having an associated demographic profile with demographic data for each of multiple registered users and identifying those registered users having demographic information that matches the demographic profile for the ad file;

identifying a time period over which the ad file should be played;

adding the ad file to a playlist for each registered computer user if the ad file is matched to the computer user demographic information and if the identified time period is available for the computer user; and

decreasing an available ad file impression number for each identified and matched computer user.

Claim 24 -32 (Canceled)

Claim 33 (Previously presented): A user computer that receives files from an access control system

7/18

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

connected to a network, the user computer comprising:

a central processing unit that can establish communication with the access control server;  
program memory that stores programming instructions that are executed such that the user computer establishes a communication link from the user computer to the access control system and then launches a viewer program that controls a status of the communication link, detects times when the user is not actively sending or receiving data from the network, and uses such times to download ad files from the network to the user computer, such that the viewer program maintains a pool of ad files at the user computer for display and performs ad pool management tasks, and then periodically opens a viewer program window in which a next ad file from the ad file pool is displayed and hides the viewer program window in which a next ad file from the ad file pool is displayed, keeping the viewer program window closed for a predetermined quiet interval, wherein the viewer program manages the ad file pool so as to keep track of the number of times each ad file in the ad file pool has been viewed and determine when each ad file in the ad file pool should no longer be viewed.

Claim 34 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include managing the ad file pool includes determining that an ad file should not be viewed after the ad file has been viewed a predetermined number of times.

Claim 35 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include managing the ad file pool includes determining that

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

an ad file should not be viewed after the ad file has been viewed for a predetermined number of calendar days.

Claim 36 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include managing the ad file pool includes discarding an oldest ad file from the ad file pool if the ad file pool size exceeds a predetermined size limit value.

Claim 37 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include managing the ad file pool includes not tracking an ad file as having been viewed if the viewing of the ad file is prematurely halted before normal completion.

Claim 38 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include the viewer program maintains an ad information table of a local database in the user computer.

Claim 39 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include periodically performing fraud control, wherein the viewer program sends a pulse message to the access control system at predetermined intervals, and the access control system causes the communication link to the network to be severed if it fails to receive an expected pulse message.



Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

Claim 40 (Previously presented): A user computer as defined in claim 39, wherein the viewer program terminates the network connection if fraud is indicated.

Claim 41 (Previously presented): A user computer as defined in claim 33, wherein the access control system includes an Ad server that provides the ad files to a user, a Network Access Server that assigns a network address for an authorized user, and an Access, Authorization, and Accounting server that determines if authorization should be granted to a user.

Claim 42 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include:

determining ad impression viewing data corresponding to the number of times each ad file in the ad file pool has been viewed;

determining click through data corresponding to network addresses visited by the user during the viewing of an ad file; and

reporting the ad impression viewing data to the access control system.

Claim 43 (Previously presented): A user computer as defined in claim 33, wherein the operations performed by the user computer further include storing state information for the viewing program at the user computer.

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

Claim 44 (Previously presented): A user computer as defined in claim 33, wherein the viewer program displays closed captioning information.

Claim 45 (Previously presented): A user computer as defined in claim 33, wherein the viewer program tracks the number of online network access sessions by the user computer.

Claim 46 (Previously presented): A user computer as defined in claim 33, wherein the viewer program tracks the time spent online with network access by the user computer.

Claim 47 (Previously presented): A program product for use in a computer system that executes program steps recorded in a computer-readable media to perform a method for providing a user computer with access to files of a network, the program product comprising:

- a recordable media; and

- a program of computer-readable instructions executable by the computer system to perform method steps comprising:

- establishing a communication link from the user computer to an access control system of the network;

- launching a viewer program that controls a status of the communication link;

- detecting times when the user is not actively sending or receiving data from the network, and downloading ad files from the network to the user computer during such times, such that the viewer program maintains a pool of ad files at the user computer for display and

11/18

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

performs ad pool management tasks;

periodically opening a viewer program window in which a next ad file from the ad file pool is displayed;

hiding the viewer program window after a predetermined number of ad files from the ad file pool have been played and keeping the viewer program window hidden for a predetermined quiet interval; and

managing the ad file pool so as to keep track of the number of times each ad file in the ad file pool has been viewed and determine when each ad file in the ad file pool should no longer be viewed.

Claim 48 (Previously presented): A program product as defined in claim 47, wherein managing the ad file pool includes determining that an ad file should not be viewed after the ad file has been viewed a predetermined number of times.

Claim 49 (Previously presented): A program product as defined in claim 47, wherein managing the ad file pool includes determining that an ad file should not be viewed after the ad file has been viewed for a predetermined number of calendar days.

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

**Claim 50 (Previously presented):** A program product as defined in claim 47, wherein managing the ad file pool includes discarding an oldest ad file from the ad file pool if the ad file pool size exceeds a predetermined size limit value.

**Claim 51 (Previously presented):** A program product as defined in claim 47, wherein managing the ad file pool includes not tracking an ad file as having been viewed if the viewing of the ad file is prematurely halted before normal completion.

**Claim 52 (Previously presented):** A program product as defined in claim 47, wherein the viewer program maintains an ad information table of a local database in the user computer.

**Claim 53 (Previously presented):** A program product as defined in claim 47, further including periodically performing fraud control, wherein the viewer program sends a pulse message to the access control system at predetermined intervals, and the access control system causes the communication link to the network to be severed if it fails to receive an expected pulse message.

**Claim 54 (Previously presented):** A program product as defined in claim 53, wherein the viewer program terminates the network connection if fraud is indicated.

**Claim 55 (Previously presented):** A program product as defined in claim 47, wherein the access control system includes an Ad server that provides the ad files to a user, a Network Access Server

Appl. No. 09/545,639  
Amdt. Dated 9/13/2004  
Response to Office action dated 06/17/2004

that assigns a network address for an authorized user, and an Access, Authorization, and Accounting server that determines if authorization should be granted to a user.

Claim 56 (Previously presented): A program product as defined in claim 47, further including:

determining ad impression viewing data corresponding to the number of times each ad file in the ad file pool has been viewed;

determining click through data corresponding to network addresses visited by the user during the viewing of an ad file; and

reporting the ad impression viewing data to the access control system.

Claim 57 (Previously presented): A program product as defined in claim 47, further including storing state information for the viewing program at the user computer.

Claim 58 (Previously presented): A program product as defined in claim 47, wherein the viewer program displays closed captioning information.

Claim 59 (Previously presented): A program product as defined in claim 47, wherein the viewer program tracks the number of online network access sessions by the user computer.

Claim 60 (Previously presented): A program product as defined in claim 47, wherein the viewer program tracks the time spent online with network access by the user computer.